GAO

Report to the Secretary of the Air Force

December 1986

# MILITARY LOGISTICS

# Improvements Needed in Managing Air Force Special Stock Levels





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United States General Accounting Office Washington, D.C. 20548

National Security and International Affairs Division B-223764

December 23, 1986

The Honorable Edward C. Aldridge, Jr. The Secretary of the Air Force

Dear Mr. Secretary:

We evaluated the reasonableness and accuracy of the Air Force's procedures and practices for establishing and managing special stock level requirements for recoverable aircraft and missile spare parts. Our review of special stock level requirements valued at \$110 million, representing a sample of items managed by two of the five air logistics centers, revealed that they were overstated by \$27.9 million due to procedural deficiencies and item manager errors. Elimination of these deficiencies and errors will preclude the procurement of unneeded spares.

We also found that \$48 million in adjusted base stock levels, used to determine the special stock level requirements and included in the system used by centers to make buy and repair decisions, were not included in the systems used by the centers to allocate base stocks and may not have been included in base stock records. Conversely, the allocation systems included \$1.3 million in adjusted base stock levels that had not been approved or entered in the system used to make buy and repair decisions.

These discrepancies will, if not corrected, result in unneeded buys and repairs or improper stock allocations to bases.

Actions taken or planned by the Air Force Logistics Command (AFLC) will eliminate the procedural deficiency that caused \$21.7 million of the overstated special stock levels we identified. However, actions are needed to correct the other deficiencies noted in this report, and we are recommending that you direct a number of efforts (see p. 16).

Appendix I contains information on the objectives, scope, and methodology of our review.

<sup>&</sup>lt;sup>1</sup>Recoverable, as opposed to consumable, spare parts normally can be repaired and reused after becoming unserviceable.

## Background

AFIC's mission is to provide logistics support to ensure that Air Force weapon systems located at bases are maintained at the maximum operational capability at the least possible cost. AFIC carries out its responsibilities largely at its headquarters at Wright-Patterson Air Force Base, Ohio, and at the five air logistics centers. These centers use a standard computerized system, the Recoverable Consumption Item Requirements System (the D041 system), to compute total depot and base stock level requirements on a quarterly basis. These computations consist of initial and final computations. After reviewing the initial computations, item managers adjust and correct data in the system before making the final computations. Requirements resulting from the final computations determine the specific spares items and quantities that will actually be bought, repaired, and distributed to individual bases.

Bases use the Standard Base Supply System (SBSS) to compute the amount of stock needed to support normal operations, based on historical experience. When bases believe that these normal levels, which include operating stock and safety stock levels, are inadequate because of factors or events not programmed in the SBSS, they can request approval for revised levels, "adjusted stock levels," from item managers at the appropriate air logistics center. The bases should input the approved adjusted stock levels to the SBSS to replace their previously computed normal stock levels. They should also forward to the centers documentation showing that these adjusted levels have been input to the SBSS. This documentation should then be input to the centers' automated systems (D143H and D028) which determine how the levels will be allocated among the bases. This procedure is intended to ensure that data in the SBSS and centers' systems are in agreement and that, therefore, the bases will requisition material to fill stock levels that have been approved and allocated to them by the centers.

The differences between bases' adjusted stock levels and their normal levels are known as special stock levels. After completion of the D041 system initial computation mentioned above, item managers determine and enter special stock level requirements in the D041 system. The D041 system then makes the final quarterly computation of total depot and base requirements.

AFLC Regulation 57-4 specifies the methodology to be followed by item managers in determining special stock levels.

### Special Stock Level Requirements Were Overstated

Our review of 96 sample items with special stock level requirements at the Ogden and Oklahoma City Air Logistics Centers disclosed that these requirements were overstated by \$27.9 million because (1) AFLC's method for determining special stock levels was inappropriately based on SBSS-computed base stock requirements instead of those computed by the D041 system, (2) special stock levels were unnecessarily authorized for peak flying hours, and (3) item managers did not follow prescribed procedures and made mathematical errors when determining special stock levels.

Methodology for Determining Special Stock Levels Did Not Consider D041 System-Computed Base Stock Requirements Special stock level requirements for our sample items were overstated by \$21.7 million because AFLC's methodology for determining them used base requirements computed by the SBSS instead of those computed by the D041 system at air logistics centers. The D041 system-computed requirements, which determine the items and quantities of spares that will actually be bought or repaired and distributed to bases, provide greater protection against stockouts, thereby reducing the need for special levels.

When we began our review, AFLC Regulation 57-4 directed item managers to (1) reduce adjusted stock levels approved for bases by the normal base stock levels computed by the SBSS and (2) enter the differences in the D041 system, after completion of the initial quarterly requirement computation, as special stock levels. We found that the normal base stock requirements computed by the D041 system generally exceed the normal base stock requirements computed by the SBSS. This difference occurs because the D041 system, unlike the SBSS, considers projected increases in future usage and computes larger safety levels to provide added protection against stockouts. For example, the SBSS computed a total normal base stock level of 102 for one of our sample items. but the D041 system computed a normal base stock level of 239, more than twice as much. The higher normal base stock requirements computed by the D041 system can be used to offset the need for special stock levels, which are based on the lower normal base stock requirements computed by the SBSS. We therefore concluded that the D041 system-computed base stock requirements should be used (instead of the SBSS-generated requirements) to determine special stock levels to bring them in line with actual requirements.

We discussed this conclusion with AFLC officials responsible for establishing policy for special stock level requirements, who agreed with the need to improve the methodology for determining special stock levels.

Subsequently, on September 24, 1985, AFLC issued new procedures requiring that D041 system-computed base stock requirements be used to determine special stock level requirements.

These revised procedures direct item managers to compare the total of the SBSS-computed normal base stock levels to the initial D041 system-computed normal base stock requirements. When the initial D041 system normal base stock requirements equal or exceed the total normal base stock levels computed by the SBSS, special stock level requirements are determined by reducing the total approved base stock levels by the D041 system requirements. Table 1 shows how the special stock level requirements would have been computed for one of our sample items under AFLC's old method and its revised method.

Table 1: Comparison of Methods for Determining Special Stock Level Requirements for NSN 1630-00-242-0942, B-52 Main Wheel

	*
Old method	Amount
Adjusted stock levels	258
Less SBSS-computed normal stock levels for bases with adjusted stock levels	92
Special stock level requirements	166
Revised method	
Adjusted stock levels	258
Plus normal stock levels of bases with no adjusted stock levels	10
Total approved stock levels	268
Less initial D041 system-computed normal base stock level requirements	239
Special stock level requirements	29

The special stock level requirement for this item under AFLC's old method was 166. If the revised method had been used, the requirement would have been 29, a difference of 137 requirements valued at \$489,363. Our recomputation for all our sample items, using this revised method, resulted in reductions in special stock level requirements totaling \$21.7 million.

We also advised AFLC officials that, in our opinion, this revised methodology could be further improved by reprogramming the D041 requirements computation system to automatically determine special stock level requirements based on the <u>final</u>, rather than the <u>initial</u>, base stock level requirements. As discussed earlier, the D041 system's quarterly requirement computation consists of both an initial and final computation. Adjustments, such as adding special stock level requirements and correcting errors, are made to arrive at the final computation. We pointed out that because the final D041 system requirements, which

determine actual buy or repair decisions, may differ from the initial requirements, special stock level requirements may be understated or overstated if not based on the final computation. AFLC officials agreed, but stated that before they could automate the procedure, to determine special stock levels based on the final D041 system computation, they would have to assure that the automated system (D143H), which contains a centralized record of adjusted stock levels, is (1) reconciled with base records to insure data compatibility and (2) interfaced with the D041 requirements computation system.

We recomputed special stock level requirements for our sample items using the final D041 system-computed requirements. This recomputation showed that special stock level requirements computed under the old method would have been reduced by \$21.6 million, compared to the \$21.7 million reduction, mentioned previously, which resulted from our recomputation using the initial D041 system requirements. Although using the final instead of the initial D041 system requirements resulted in a difference of only \$0.1 million, the special stock level requirements increased by \$0.8 million for nine items and decreased by \$0.7 million for seven items. Therefore, while revising AFLC's methodology to base special stock levels on the final D041 system computation may not change the total value of such levels significantly, it should improve the accuracy of special stock levels for individual items.

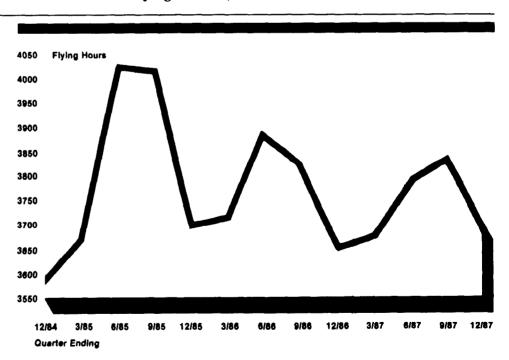
Special Stock Level Requirements Not Needed to Support Peak Demand Periods The Oklahoma City Air Logistics Center unnecessarily authorized special stock level requirements valued at \$3.2 million for eight items² to support peak demand periods for the Air Training Command (ATC) flying program for T-38 aircraft. These requirements were not needed because the D041 system automatically computes operating stock level requirements needed to support peak demand periods. The D041 system computes these requirements based on 2 years of historical usage data and projected usage data. Therefore, peak demand periods are reflected in both the historical and projected usage data. In addition, the D041 system computes safety stock level requirements to provide protection for demands that may exceed the calculated projections.

<sup>&</sup>lt;sup>2</sup>Only two of these eight items were in our sample. However, because all eight were included in the same adjusted stock level authorization, we examined all eight.

Forecasts of Operating Stock Requirements Consider Peak Demand Periods The D041 system uses historical and projected usage data to compute item operating stock requirements. Historical demand data from the preceding eight quarters are maintained for all D041 system items. The past demands are divided by the corresponding past program to determine the rate of usage in relation to that particular type of program. ATC programs are expressed in flying hours. Therefore, when the demand rate is applied to forecasted flying hour programs on a quarterly basis, the D041 system computes the future requirements. If flying hours are forecasted to be higher during a particular period in the future, the D041 system will automatically compute increased operating stock requirements for that period.

To determine if the future flying hour program in the D041 system reflected ATC's peak demand periods, we analyzed the quarterly forecasted flying hour program as shown in the September 1984 D041 system requirements computation for T-38 items. We found that the forecasted demands for these items peak in the quarters ending in June and September each year, when ATC's needs are greatest. Figure 1 illustrates forecasted flying hours for the T-38 items we reviewed.

Figure 1: Illustration of Forecasted Flying Hours for T-38 Items.



Because ATC's peak flying hours have been accurately forecasted by the D041 system and its peak demand periods have been recurring and thus

reflected in historical demand data, the D041 system can automatically compute sufficient requirements for the ATC peak demand periods without adding special stock level requirements.

Operating Stock and Safety Level Requirements Were Adequate to Support Peak Period Demands We also compared projected operating stock and safety level requirements for the eight T-38 items with actual usage for the year ended September 1985 and found that, had special stock levels not been authorized for the eight items

- operating stock requirements alone were adequate to support peak demand periods for five items,
- combined operating stock and safety level requirements were adequate to support peak demand periods for two items, and
- operating stock and safety level requirements would have been adequate to meet projected peak demands for the remaining item had quantities of this item not been damaged due to physical abuse.

The following examples illustrate these three situations.

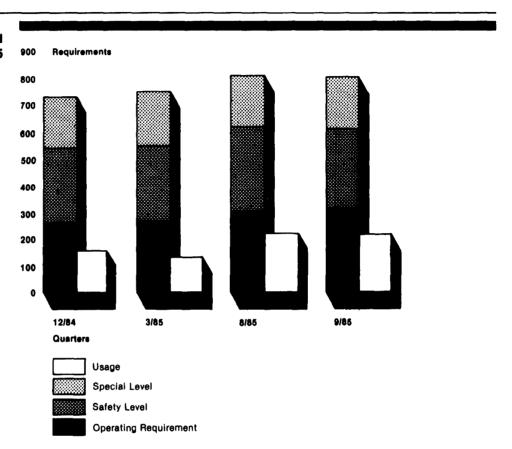
Adequacy of operating stock to meet actual demands. For Stock No. 6610-00-531-4625, an accelerometer used on several aircraft, including the T-38, projected operating stocks for each of the four quarters ending September 30, 1985, exceeded usage during each of those quarters, as shown in table 2.

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Table 2: Adequacy of Operating Stock to Support Demands for Stock No. 6610-00-531-4625 D	juring tear Enged September 30,
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1985	

Quarter ended	Operating stock	Safety stock	Special stock	Total available	Usage	Difference
12-31-84	265	277	190	732	160	572
3-31-85	274	282	190	746	133	613
6-30-85	312	308	190	810	220	590
9-30-85	314	304	190	808	219	589

Figure 2 illustrates the adequacy of operating stock requirements to support peak demand periods for this item.

Figure 2: Adequacy of Operating Stock Requirements to Support Peak Demand Periods for Stock No. 6610-00-531-4625 During Year Ended September 30, 1985



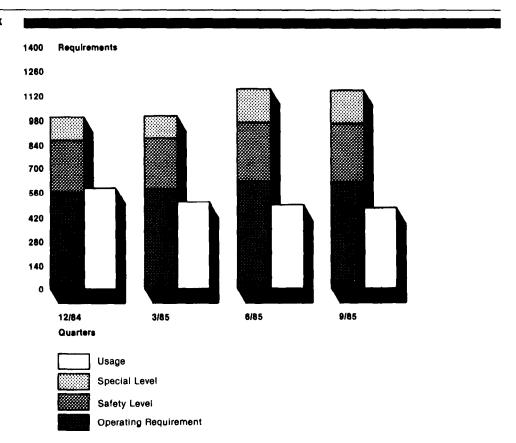
• Adequacy of combined operating and safety stocks to meet actual demands. For Stock No. 6610-00-821-2635, an indicator used on several aircraft, including the T-38, actual usage exceeded operating stocks by 20 items in the December 1984 quarter. However, the safety stock level for that quarter totaled 296 items. Therefore, the operating and safety stock levels were adequate to meet all demands, and operating stocks alone were sufficient to satisfy all demands in the subsequent three quarters, as shown in table 3.

Table 3: Adequacy of Operating and Safety Stocks to Support Demands for Stock No. 8610-00-821-2635 During Year Ended September 30, 1985

Quarter ended	Operating stock	Safety stock	Special stock	Totai available	Usage	Difference
12-31-84	570	296	187	1,053	590	463
3-31-85	584	296	187	1,067	507	560
6-30-85	639	327	187	1,153	487	666
9-30-85	637	326	187	1,150	467	683

Figure 3 illustrates this for the item.

Figure 3. Adequacy of Operating Stock and Safety Level Requirements to Support Peak Demand Periods for Stock No. 6610-00-821-2635 During Year Ended September 30, 1985



• Operating and safety stock requirements exceeded because of item damage. For stock number 6610-00-758-3486, transmitter AOA (angle-of-attack), usage for the year ended September 30, 1985, exceeded operating and safety level stocks by 41 units. As a result, 41 of the 73 special level quantities were used. This item, resembling a motorcycle jumpstart pedal, is mounted on the outside of the aircraft and is used to measure wind flow across the wing. According to the item equipment specialist, the operating and safety level stocks for this item would have satisfied all demands, including peak demands, had excessive demands not occurred due to damage resulting from physical abuse. Maintenance personnel had damaged the items by standing on them to work on the outside of the aircraft. Also, in the winter months heaters were attached to the items to prevent them from icing up. The continuous operation of the heaters when the aircraft were on the ground overheated and damaged quantities of the items. To correct these problems, the equipment

specialist issued directives advising maintenance personnel of the precautions to be taken to avoid item damage.

Item Manager Errors Caused Overstated and Understated Special Stock Level Requirements Item managers did not always determine special stock level requirements in accordance with procedures prescribed by AFLC Regulation 57-4. They also made mathematical errors in determining these requirements. Our review disclosed that the special stock level requirements were inaccurate for 45 of the 96 items we sampled—or 47 percent. As a result, special stock level requirements in the D041 system computations were overstated by \$3.1 million for some of the 96 items and understated by \$0.1 million for others, with a net overstatement of \$3 million.

The following examples illustrate the types of errors item managers made and the impact the errors had on special stock level requirements.

Stock No. 2840-01-094-6442CN: A Gear Box Used on the A-7 and TF-41 Aircraft

AFIC Regulation 57-4, prior to its revision in September 1985, directed item managers to reduce adjusted stock levels by the normal base stock levels to determine special stock level requirements. For this particular item, only two bases had adjusted stock levels, of 1 each. One base had a normal stock level of 1 and the second base had a normal stock level of zero for the gear box. Thus, the special stock level requirement should have been 1, based on AFIC's guidance. However, the item manager input a special stock level requirement of 2 to the D041 system. Consequently, the special stock level requirement was overstated by a quantity of 1, valued at \$111,650.

Stock No. 2620-00-200-1848: A Tire Used on the Nose Landing Gear of the C-135 Aircraft

AFLC Regulation 57-4 directed item managers to determine special stock level requirements based on approved adjusted stock levels. For this item, the item manager did not include adjusted stock levels approved for three bases in determining special stock level requirements. As a result, the special stock level requirement was understated by 7, valued at \$3,180.

Stock Nos. 1377-00-628-5181, 1377-00-125-7777, 1377-00-845-1059, 1377-01-137-6041, 1377-00-891-6315, 1377-00-262-1679: Aircraft Ejection Devices Although AFLC Regulation 57-4 required item managers to determine special stock level requirements based on adjusted stock levels, they did not follow this requirement for the six cartridge-actuated and propellant-actuated devices (i.e., explosive devices used to eject aircraft seats and canopies in emergencies) included in our sample. Instead, they relied on reports that showed the number and location of aircraft

requiring these devices. Without determining whether the bases had established adjusted stock levels, item managers input special stock level requirements of 175 to the D041 system for the six ejection devices.

Our review disclosed that bases had established adjusted stock levels of 35. Because ejection devices are not authorized for normal base stockage, the special stock level requirements for these devices should have equaled the adjusted stock levels. In other words, the item managers should have determined special stock level requirements of 35, not 175. Thus, the special stock level requirements were overstated by 140, valued at \$288,000.

## Discrepancies Between Records Showing Adjusted Base Stock Levels

We found that \$48 million of adjusted base stock levels, used to determine special stock level requirements and included in the system used by centers to make buy and repair decisions, were not recorded in the systems used by the centers to allocate base stocks and may not have been included in base stock records. Conversely, the allocation systems included \$1.3 million of adjusted base stock levels that had not been approved or entered in the system used to make buy and repair decisions. These discrepancies will, if not corrected, result in unneeded buys and repairs or improper stock allocations to bases.

As previously stated, if bases believe that their normal stock levels will not meet their needs, they may request adjusted stock levels and submit them for item manager approval. After receiving approval, bases are to input the adjusted stock levels to the SBSS and forward transaction cards for these levels to the appropriate air logistics center for input to an automated system (D143H system). This system is intended to provide a centralized record of adjusted stock levels and is to be used in determining special stock level requirements for quarterly input to the D041 system. The D143H system also provides its record of adjusted stock levels to another automated system (D028 system) which uses these data to establish priorities for, and allocation of, base stock level requirements computed by the D041 system.

Air Force Manual 67-1 requires bases and item managers to ensure that adjusted stock levels are accurately recorded and maintained in the D143H system. Adjusted stock levels in this system are to agree with those records maintained by bases. According to air logistics center officials, the D143H system has not been accurately maintained and therefore has not been used to determine special stock level requirements.

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Instead, item managers have used the normal base stock level figures included in the D104 Stock Balance and Consumption Report<sup>3</sup> and documents reflecting bases' requests for adjusted stock levels to manually determine special stock level requirements, which they input quarterly to the D041 requirement system.

To determine the extent and impact of the discrepancies, we compared adjusted stock levels maintained in the D143H system with item managers' records of approved adjusted stock levels for our sample items. We found that the D143H system did not include \$48 million (37 percent) of the \$130 million in adjusted base stock levels approved by item managers and included in the D041 requirement system. Conversely, we found that the D143H system included \$1.3 million of adjusted stock levels that had not been approved or input to the D041 requirement system.

To the extent that this \$48 million represents requirements no longer needed by the bases, unnecessary buys and repairs will result from their inclusion in the D041 system. Conversely, if these levels are needed, failure to include them in the D143H system will cause total requirements to be improperly allocated to bases, and will result in undersupport or over-support for individual bases. Also, the \$1.3 million of unapproved adjusted stock levels included in the D143H system, but not in the D041 system, will result in improper base stock allocations.

According to center officials, the D143H system was not accurately maintained because bases either did not enter the adjusted stock levels in their records or did not submit required transaction cards of adjusted stock levels entered into their records to the air logistics centers for input to the D143H system. While the Department of Defense (DOD) agreed that the discrepancies discussed above existed, it attributed them to data transmission problems. Because we did not perform work at the base level, we are not in a position to agree or disagree with either the center officials' or DOD's statements. DOD has informed us (see app. II) that action is underway to eliminate the discrepancies and that the action is expected to be completed by March 1987.

<sup>&</sup>lt;sup>3</sup>The Stock Balance and Consumption Report includes asset balances and base stock levels maintained in the SBSS.

#### Conclusions

AFLC's action to revise its methodology for establishing special stock levels will result in more accurate requirements determinations and preclude procurement of unneeded material by its five air logistics centers. However, we believe further revisions are necessary. AFLC's revised methodology determines special stock level requirements based on the initial requirements computed by the D041 system, not the final requirements. Because final D041 system requirements, which determine actual buy or repair actions, may differ from initial D041 system requirements, special stock level requirements, if not based on the final computation, may be overstated or understated. Rather than redetermine special stock level requirements, which would require an additional D041 system computation, we believe, and AFLC officials agreed, that the D041 system should be programmed to automatically determine special stock level requirements at the time final requirements are determined. Because automating the process would eliminate item manager computations, it would also eliminate human errors like those noted during our review.

To automate special stock level requirements determinations, the D041 system needs data on bases' normal and adjusted stock levels, which should be included in the D143H system. However, the two systems are not interfaced and the D143H system is inaccurate. We believe AFLC should interface the two systems and periodically reconcile data maintained in the D143H system with data in (1) the SBSS and (2) item manager adjusted stock level records. As part of these reconciliations, AFLC should identify and eliminate the causes of any inaccuracies.

Because the D041 system automatically computed operating stock and safety level requirements needed to support peak demand periods for the Air Training Command items we reviewed, we believe that special stock level requirements are not needed for that command's peak flying hours. While our analysis of this issue was limited, we believe that (1) special stock levels may not be needed for peak flying hours for all Air Force commands and (2) AFLC should require detailed justification before establishing such levels.

### Recommendations

We recommend that you direct the Commander, AFLC, to:

 Program the Recoverable Consumption Item Requirements Computation System (D041) to automatically determine special stock level requirements at the time final requirements are computed.

- Establish procedures to provide for annual reconciliations of base stock requirements included in base stock records and those reflected on air logistics center records. As part of these reconciliations, causes of any discrepancies should be identified and eliminated.
- Direct the air logistics centers to either (1) enter the adjusted base stock levels in the D143H system immediately after item manager approval, or (2) establish procedures to ensure that approved adjusted base stock levels are input to both base stock records and the D143H system within a reasonable time.
- Direct air logistics centers to require detailed justification for adjusted stock level requests to support peak demand periods when it is determined that normally forecasted requirements should have been sufficient to satisfy actual usage. If it is determined that normally forecasted requirements are not sufficient to avoid stockouts during peak demand periods, the air logistics centers should be required to investigate the causes of the stockouts and consider the feasibility of redistributing available worldwide assets prior to authorizing special stock levels.

# Agency Comments and Our Evaluation

DOD concurred in our findings and recommendations and informed us that the Air Force had implemented or was in the process of implementing improvements to correct the deficiencies we identified. A copy of DOD's comments is included as appendix II to this report.

We have reviewed the corrective actions that DOD indicated had been or would be taken. We believe that these actions, if fully implemented, will improve the Air Force's management of its special stock levels for recoverable items.

As you know, 31 U.S.C. 720 requires the head of a federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

We are sending copies of this report to the Chairmen, House and Senate Committees on Appropriations and on Armed Services, House Committee on Government Operations, and Senate Committee on Governmental Affairs; the Director, Office of Management and Budget; and the

Secretary of Defense. Copies will also be made available to others upon request.

Sincerely yours,

Frank C. Conahan

Assistant Comptroller General

# Objectives, Scope, and Methodology

Our review objective was to evaluate the reasonableness and accuracy of the Air Force Logistics Command's procedures and practices for establishing and managing special stock level requirements for recoverable aircraft and missile spare parts. To accomplish our objective, we performed audit work from April 1985 to April 1986 at the Ogden Air Logistics Center, Hill Air Force Base, Utah; Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma; and Headquarters Air Force Logistics Command, Wright-Patterson Air Force Base, Ohio.

We reviewed Air Force regulations for determining special stock level requirements and interviewed Air Force officials responsible for establishing special stock level policy and administering the special stock level program. For our review, we randomly selected items from a stratified sample of all items with special stock level requirements entered into the December 31, 1984, D041 system requirements computation. In total, our sample included 96 items: 53 at the Ogden Air Logistics Center and 43 at the Oklahoma City Air Logistics Center.

In selecting our sample, we eliminated items having special stock level requirements based on Initial Spares Support Lists, because the Air Force Audit Agency was reviewing such requirements. Thus, when the special stock level requirement for a sample item resulted from an Initial Spares Support List, we replaced it with the next randomly selected item. However, we do not consider our sample, even though it was based on a random selection process, to be projectible and have not projected our findings to the entire universe of items having special stock level requirements.

To determine whether the special stock level requirements included in the D041 system recoverable item requirements computations were correctly determined, we reviewed D041 system requirements computations, documentation authorizing adjusted stock levels, and documentation showing how item managers determined the special stock level requirements for each of our sample items. We evaluated the accuracy of special stock level requirements determined by the item managers for each of our sample items by recomputing these requirements based on applicable regulations and instructions. In addition, we assessed the appropriateness of the prescribed methodology for determining special stock level requirements and developed and tested alternative methods.

Appendix I
Objectives, Scope, and Methodology

Throughout our review, we relied on data in the D041 system. Because the D041 system automatically receives input from several other systems, we considered it impractical to analyze each system to determine the reliability of data obtained from them. As an alternative, we determined that our universe data generally agreed with Air Force recoverable item requirements inventory analysis reports for corresponding periods, and we verified the accuracy of data on each individual sample item to source documents. Thus, we ensured that we used the same data that the Air Force used in managing these items. We performed our review in accordance with generally accepted government auditing standards.

# Comments From the Deputy Assistant Secretary of Defense (Logistics)



THE OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301-8000

(10 NOV 1986

Mr. Frank C. Conahan
Assistant Comptroller General for
National Security and International Affairs
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "MILITARY LOGISTICS: Improvements Needed In Managing Air Force Special Stock Levels," dated September 22, 1986 (GAO Code 392100, OSD Case 7134).

The DoD generally agrees with the GAO findings and recommendations. The Air Force has implemented, or is in the process of implementing, improvements to correct the deficiencies cited in the GAO report. Detailed comments are included in the enclosure.

The Department appreciates the opportunity to comment on the draft report.

Sincerely,

Maurice N. Shriber
Deputy Assistant Secretary of Defense
(Logistics)

Enclosure

#### DEPARTMENT OF DEFENSE COMMENTS ON

GAO DRAFT REPORT - DATED SEPTEMBER 22, 1986 (GAO CODE 392100) OSD CASE 7134

"MILITARY LOGISTICS: IMPROVEMENTS NEEDED IN MANAGING AIR FORCE SPECIAL STOCK LEVELS"

#### FINDINGS

FINDING A: Methodology For Determining Special Stock Levels Results In Overstated Requirements. The GAO reported that when it began its review, Air Force Logistics Command (AFLC) regulations directed item managers to (1) reduce adjusted stock levels approved for bases by the normal base stock levels computed by the Standard Base Supply System (SBSS) and (2) enter the differences in the D041 Recoverable Consumption Item Requirements System as special stock levels. The GAO found, however, that because the D041 system considers projected increases in future usage and computes larger safety levels, the normal base stock requirements computed by the D041 system can be used to offset the need for special stock levels and should, therefore, be used to bring special stock levels in line with the actual requirements. The GAO pointed out that in September 1985 the AFLC issued new procedures requiring that special stock level requirements be based on D041 base stock requirements, which the GAO estimated resulted in reductions in special stock levels of \$21.7 million for the items sampled. While acknowledging the benefits of these new procedures, the GAO observed that the methodology could be further improved by reprogramming the D041 system to automatically determine special stock level requirments based on the final rather than initial base stock requirements. Based on its assessment of sampled items, the GAO concluded that although this further change may not significantly change the total value of special stock levels, it would improve the accuracy of special stock levels for individual items. (pp. 4-9, GAO Draft Report)

DOD COMMENTS: Concur. Effective with the June 1986 computation cycle, the D041 computation was changed to use a new procedure to compute the total organizational and intermediate maintenance (OIM) base stock level. Implementation of this process assures that the D041 OIM safety level considers adjusted levels in arriving at a total base stock level. This mechanical process will occur during the final D041 computation.

Now on pp. 3-5.

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Appendix II
Comments From the Deputy Assistant
Secretary of Defense (Logistics)

Now on pp. 5-10.

Now on pp. 10-11.

FINDING B: Special Stock Level Requirements Not Needed to Support Peak Demand Periods. The GAO reported that the D041 system computes operating stock level requirements based upon two years of historical and projected usage data. The GAO analyzed the D041 requirements computations for several items that support the Air Training Command (ATC) T-38 flying program. The GAO found that the D041 system automatically computes the operating stock level requirements for the items to support peak demand periods. The GAO also found that the safety level requirements for the sampled T-38 items were adequate to support peak demand periods. Based on this analysis, the GAO concluded that special stock level requirements, valued at \$3.2 million, were unnecessarily authorized to support peak demand periods for the T-38 flying program. (pp. 9-17, GAO Draft Report)

<u>DOD COMMENTS</u>: Concur. The Oklahoma City Air Logistics Center has carefully reviewed the items cited in this report and has reduced or eliminated adjusted level quantities, as necessary.

FINDING C: Item Manager Errors Affected Special Stock Level Requirements. The GAO found that for 47 percent of the items sampled, the special stock level requirements were inaccurate. The GAO identified several instances where the stock level inaccuracies were caused by item managers not following prescribed AFLC regulations. The GAO also found instances where item managers made mathematical errors in determining the special stock level requirements. As a result of these item manager errors, the GAO concluded that there was a net overstatement of \$3 million in the special stock level requirements sampled. (pp. 17-20, GAO Draft Report)

<u>DOD COMMENTS</u>: Concur. AFLC Regulation 57-4, Chapter 14, has been rewritten to include a standardized form for computation of special levels. Use of the standardized form will help eliminate errors and improve accuracy.

FINDING D: Discrepancies Between Records Showing Adjusted Base Stock Levels. The GAO reported that, according to Air Logistics Center officials, the automated system showing adjusted stock levels (the D143H) has not been accurately maintained and, therefore, has not been used in determining special stock level requirements. According to the GAO, Center officials cited two reasons why the D143H system was not accurately maintained: (1) bases did not enter the adjusted stock levels in their records, or (2) bases did not submit required information to the Air Logistics Centers for input into the D143H system. The GAO compared adjusted stock levels maintained in the D143H system with managers' records of approved adjusted stock levels for the sampled items. Based on this analysis, the GAO found that \$48

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million of adjusted base stock levels, used to determine special stock levels requirements and included in the systems used by the Centers to make buy and repair decisions, were not recorded in the systems used by the Centers to allocate base stocks and may not have been included on base stock records. The GAO further found that the allocation systems included \$1.3 million of adjusted base stock levels that had not been approved or entered in the system used to make buy and repair decisions. The GAO concluded that if not corrected, these discrepancies will result in unneeded buys and repairs, or improper stock allocations to bases. (pp. 20-22, GAO Draft Report)

DOD COMMENTS: Partially concur. The Department agrees that discrepancies exist among the systems cited in the GAO audit. The problem, however, is with data transmission and not failure to submit the data to the appropriate system. The AFLC, in conjunction with Air Force Headquarters and the Data System Design Office, developed the capability to reconcile base adjusted stock levels between the Standard Base Supply System (D002A) and the Air Force Recoverable Asset Management System (AFRAMS) (D143H) when the AFLC identified a serious discrepancy in the data. Two attempts were made to reconcile adjusted stock levels in November 1985 and January 1986. The first attempt was aborted because of software difficulties. The second attempt was aborted because of faulty transmission and receipt of data necessary to complete a reconciliation. In March 1986, the Fifth Air Force Stockage Advisory Board reviewed the communications problems. A workshop was established in April 1986 to analyze the transmission of data and clarified procedural guidelines were then published. The problem, however, has not yet been resolved. A second communications workshop is scheduled in the fall, 1986 to correct the transmission problems. Completion is expected by March 1987. (See the DoD comments in response to Recommendation

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#### RECOMMENDATIONS

<u>RECOMMENDATION 1</u>: The GAO recommended that the Secretary of the Air Force direct the Commander, AFLC, to program the recoverable Consumption Item Requirements Computation System (D041) to automatically determine special stock level requirements at the time final requirements are computed. (p. 24, GAO Draft Report)

<u>DOD COMMENTS</u>: Concur. Effective with the June 1986 D041 cycle, the system has been programmed to consider special levels when computing the total organizational and intermediate maintenance base stock level during the final computation.

RECOMMENDATION 2: The GAO recommended that the Secretary of the Air Force direct the Commander, AFLC, to establish procedures to provide for annual reconciliations of base stock requirements included in base stock records and those reflected on Air Logistics Center records. As part of these reconciliations, the GAO recommended the causes of any discrepancies should be identified and eliminated. (pp. 24-25, GAO Draft Report)

DOD COMMENTS: Concur. A workshop is scheduled this fall to resolve the data transmission problems described in the DoD comments to Recommendation 4. The software to run a reconciliation is in place and can be run as soon as the communication problems are resolved.

RECOMMENDATION 3: The GAO recommended that the Secretary of the Air Force direct the Commander, AFLC, to direct the Air Logistics Centers to either (1) enter the adjusted base stock levels in the D143H system immediately after item manager approval, or (2) establish procedures to ensure that adjusted base stock levels approved by item managers are input to both base stock records and the D143H system within a reasonable time. (p. 25, GAO Draft Report)

DOD COMMENTS: Concur. Procedures will be established in AF Manual 67-1, Volume III, Part One, Chapter 6, to ensure timely processing of adjusted stock level data in the D143H system. A suspense of 45 days will be established from the date of item management approval of the adjusted stock level. If an "XE4" transaction adding the approved adjusted stock level to the D143H has not been processed, the item manager will follow-up on this action with the base. Completion date for publication of these procedures is February 1, 1987.

RECOMMENDATION 4: The GAO recommended that the Secretary of the Air Force direct the Commander, AFLC, to direct Air Logistics Centers to require detailed justification for requests of adjusted stock levels to support peak demand periods when it is determined that normally forecasted requirements should have been

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sufficient to satisfy actual usage. If it is determined that normally forecasted requirements were not sufficient to avoid stockouts that occurred during peak demand periods, the GAO recommended that Air Logistics Centers should be required to investigate the causes of the stockouts and consider the feasibility of redistributing available worldwide assets prior to authorizing special stock levels. (p. 25, GAO Draft Report)

<u>DOD COMMENTS</u>: Concur. Special levels are approved on a <u>case-by-case</u> basis and are needed when computed requirements are insufficient to support forecasted requirements. Determining the reasons for stockouts and redistribution of scarce assets are continuing functions of the Air Logistics Centers. The AFLC will reemphasize the necessity to comply with current policy.

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